

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

Applicant: WANG et al.  
Title: REDUCING EFFECTS CAUSED BY TRANSMISSION  
CHANNEL ERRORS DURING A STREAMING SESSION  
Appl. No.: 10/612,401  
Appl. Filing Date: 7/1/2003  
Examiner: Christine T. Duong  
Art Unit: 2416  
Confirmation Number: 3233

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Examiner:

In accordance with the New **Pre-Appeal Brief Conference Pilot Program**, announced July 11, 2005, this Pre-Appeal Brief Request is being filed together with a Notice of Appeal and with the required fee in response to the Final Office Action mailed June 24, 2009, and the Advisory Action mailed September 1, 2009.

Applicants respectfully request reconsideration of the present application in view of the reasons that follow. Claims 2, 4, 8, 12-14, 21-23, and 29 were cancelled previously. Claims 1, 3, 5-7, 9-11, 15-20, 24-28, and 30-32 are pending in this application.

**I. Rejection of Claims Under 35 U.S.C. § 103(a)**

In section 2 of the Office Action, Claims 1, 3, 5-7, 9-11, 15-20, 24-28, and 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0141740 to Matsui (*Matsui*) in view of U.S. Patent Publication No. 2003/0195979 to Park (*Park*). Applicants respectfully disagree because *Matsui* and *Park*, alone and in combination, fail to teach, suggest, or disclose all of the elements of at least independent Claims 1, 18, 20, and 24-26.

Independent Claims 1, 18, 20, and 24-26, recite in part:

wherein the plurality of error resilience levels includes a first error resilience level indicating a default error resilience level

of the streaming server and a second error resilience level indicating an alternative error resilience level;

On page 5 of the Office Action, the Examiner states that “*Matsui* does not explicitly disclose a default error resilience level of the streaming server.” Applicants agree that *Matsui* fails to teach at least this element of independent Claims 1, 18, 20, and 24-26.

On the continuation sheet of the Advisory Action, the Examiner states:

Park discloses “the server 10 provides or informs of at least two types of coding formats and the terminal 20 recognizes that the corresponding contents can be coded in at least two coding formats” (Park [0042]). This shows that there are two error resilience levels. Park discloses “The packetizing unit 13 packetizes the bit streams in a predetermined coding format. In the case of MPEG-4, the coding formats are divided into a coding format to code one general frame into a whole and a coding format using a data partitioning method” (Park [0039]). This shows that one of the error resilience level is a default error resilience level. Therefore, Park discloses the plurality of error resilience levels includes a first error resilience level indicating a default error resilience level of the streaming server and a second error resilience level indicating an alternative error resilience level.

On pages 19-20 of the Final Office Action, the Examiner similarly states:

**In response to Applicants' argument**, the examiner respectfully disagrees. Park discloses “the server 10 provides or informs of at least two types of coding formats and the terminal 20 recognizes that the corresponding contents can be coded in at least two coding formats” ([0042]), “the server 10 packetizes and transmits the bit streams in a general coding format to the terminal 20” ([0043]), “The packetizing unit 43 packetizes the bit streams in a predetermined coding format” ([0049]). This shows that there are two different levels from the server, where one is a default level. Therefore, Park discloses the plurality of error resilience levels includes a first error resilience level indicating a default error resilience level of the streaming server.

(Underlining added). On page 5 of the Final Office Action, the Examiner also states:

Nevertheless, *Park* discloses “the server 10 provides or informs of at least two types of coding formats and the terminal 20 recognizes that the corresponding contents can be coded in at least two coding formats. At operation S105, the server 10 packetizes and transmits the bit streams in a general coding format to the terminal 20” (*Park* [0042-0043]) and “the server 40 packetizes and transmits the bit streams in the general coding format to the terminal 50” (*Park* [0053]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a default error resilience level of the streaming server because "the packetizing unit 13 packetizes the bit streams in a predetermined coding format" (Park [0039]).

(Underlining added). Applicants respectfully disagree and submit that the Examiner has mischaracterized *Park* and fails to properly apply the plain meaning of the claim language. The fact that *Park* discloses two different coding formats, that the format is predetermined, and that one of the formats is referenced as a general coding format does not teach a *default* coding format. Based on the plain meaning, a default value indicates an automatic assignment of a value to a parameter unless the value is changed to another value based on some other determination, action, etc. *Park* fails to provide any disclosure, teaching, or suggestion that a general coding format is in any way related to a default error resilience level.

*Park* describes a “packetizing unit [that] packetizes the bit streams stored in the contents storing unit in a predetermined coding format, and packetizes the bit streams in a different coding format when a state of the network changes.” (Abstract; underlining added). In fact, *Park* repeatedly describes “a packetizing unit packetizing the bit streams stored in the contents storing unit in a predetermined coding format, and packetizing the bit streams in a different coding format when a state of the network changes.” (Paras. [0012], [0014]). *Park* also states that “[m]ore specifically, when the network has an abnormal state in the receiving of the coding request, the coding format is modified into a packet resilient coding format to be resilient from a packet loss.” (Para. [0017]; underlining added).

To indicate the coding format used, *Park* states:

...: packetizing a packet to be transmitted having a descriptor field that describes a coding format of an inner payload, generating the packet according to another coding format; and transmitting the generated packet of another coding format to the one or more terminals.

(Para. [0020]; underlining added). *Park* similarly states:

...: receiving a packet having a descriptor field indicating a coding format of an inner payload, wherein the received packet is packetized in the another coding format; and decoding, where the packet in the another coding format is de-packetized.

(Para. [0021]; underlining added). Thus, *Park* describes a first coding format for use in a first network state and a second coding format for use in a second network state considered abnormal. The coding format used is indicated to the other device using an indicator included in a descriptor field of the packet.

*Park* also states:

According to another aspect of the present invention, there is provided method of transmitting a packet to provide a multimedia streaming service to one or more terminals connected through a network, including: informing the one or more terminals of contents information comprising coding

formats and playback time of contents; receiving a coding request from the one or more terminals to perform a coding process in one of the **coding formats according to a state of the network**; and packetizing and transmitting bit streams in the requested coding format to the one or more terminals.

(Para. [0016]; underlining and bolding added). Thus, according to *Park*, the server provides coding formats to the terminal and the terminal may select a coding format based on the state of the network. If the network is in an abnormal state, the coding format selected is modified into a packet resilient coding format. *Park* fails to provide any disclosure, teaching, or suggestion that either format is in any way related to a default error resilience level. Instead, the coding format is selected based on the state of the network.

*Park* still further states:

[0039] The packetizing unit 13 packetizes the bit streams in a predetermined coding format. In the case of MPEG-4, the coding formats are divided into a coding format to code one general frame into a whole and a coding format using a data partitioning method.

[0040] In the first aspect according to the present invention, when the server 10 is connected to the terminal 20, if the terminal 20 transmits a describe command to the server 10, the server 10 transmits contents information, such as the coding formats and a playback time of the contents to the terminal 20. Accordingly, when a state of the network 30 is changed, the terminal 20 adaptively selects the coding format according to the state of the network 30 and requests the selected coding format to the server 10. The packetizing unit 13 packetizes the bit streams in the coding format requested by the terminal 20.

...

[0042] At operation S102, when the terminal 20 is connected to the server 10, the terminal 20 transmits the describe command to the server 10 to obtain the contents information. At operation S104, the server 10 transmits the contents information such as the coding formats and the playback time of the contents to the terminal 20. Here, the server 10 provides or informs of at least two types of coding formats and the terminal 20 recognizes that the corresponding contents can be coded in at least two coding formats.

[0043] At operation S105, the server 10 packetizes and transmits the bit streams in a general coding format to the terminal 20. At operation S106, the terminal 20 decodes the transmitted data in a decoding format suitable for the coding format and monitors the state of the network 30. ....

[0044] At operation S108, when monitoring the abnormal state of the network 30, at operation S110, the terminal 20 requests

the server 10 to modify the coding format into a packet resilient coding format to be resilient from the packet loss. At operation S112, the server 10 modifies the coding format into the packet resilient coding format, packetizes the bit streams in the modified format, and transmits the packetized bit streams i.e., the multimedia streams, to the corresponding terminals 20.

(Paras. [0039]-[0043]; underlining and bolding added). Thus, the server provides coding formats so that the terminal recognizes that there are at least two coding formats. If the network is in an abnormal state, the coding format is modified into a packet resilient coding format.

*Park* provides no indication that the general coding format is a default coding format. The general coding format merely refers to the “coding format to code one general frame into a whole.” (Para. [0039]; underlining added). Thus, the general coding format merely distinguishes the selected coding format from the packet resilient coding format which is selected if the network is in an abnormal state. In fact, if the network is initially in an abnormal state, the packet resilient coding format would automatically be used because, according to *Park*, the coding format is selected based on the network state as monitored by the terminal (*see* para. [0044]) or by the server (*see* paras. [0050] and [0053]).

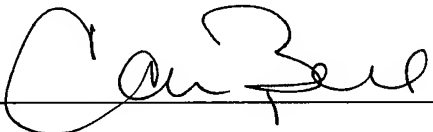
The terminal device further does not need to understand which coding format is a default coding format because the coding format is indicated in the packet itself. Thus, the system as described in *Park* has no need for a default coding format, which is used automatically if no other selection is made, because the selection is always based on the network state and the terminal knows which coding format is used because “the packet to be transmitted includes a field that indicates by which coding format ... an associated inner payload has been coded.” (Para. [0062]).

Therefore, *Park* fails to disclose, teach, or suggest at least “wherein the plurality of error resilience levels includes a first error resilience level indicating a default error resilience level of the streaming server and a second error resilience level indicating an alternative error resilience level” (underlining added) as recited in Claims 1, 18, 20, and 24-26. *Park* merely indicates that “the corresponding contents can be coded in at least two coding formats” (para. [0042]) based on the network state. A rejection under 35 U.S.C. 103(a) cannot be properly maintained where the references used in the rejection fail to disclose all of the recited claim elements. Claims 3, 5, 6, 9-11, 17, and 27-31 depend from one of Claims 1, 18, and 20. Therefore, Applicants respectfully request withdrawal of the rejection of Claims 1, 3, 5-7, 9-11, 15-20, 24-28, and 30-32.

Respectfully submitted,

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FOLEY & LARDNER LLP  
Customer Number: 23524  
Telephone: (608) 258-4263  
Facsimile: (608) 258-4258

By 

Callie M. Bell  
Attorney for Applicant  
Registration No. 54,989